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(71) Applicant (for all designated States except US): K.U.  
LEUVEN RESEARCH & DEVELOPMENT [BE/BE];  
Groot Begijnhof, Benedenstraat 58, B-3000 Leuven (BE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): MARTENS, Johan,  
Adriaan [BE/BE]; Borheidestraat 25, B-2040 Hulden-  
berg (BE). KIRSCHHOCK, Christine, Eva, Antonia

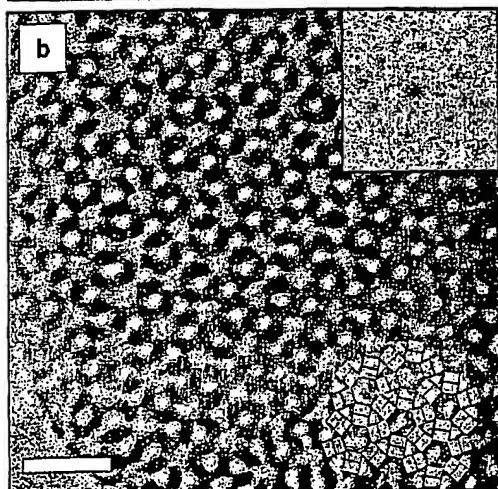
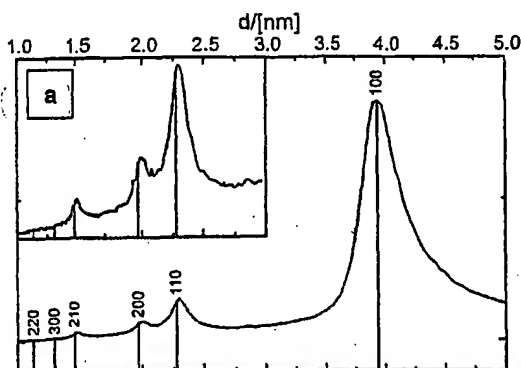
[DE/DE]; In der Kirchtanne 31, D-64297 Darmstadt  
(DE). KREMER, Sebastien, Philippe, Brigitte [BE/BE];  
Notelaarstraat 144, B-1030 Schaarbeek (BE). AERTS,  
Alexander, Jan, Maria, Herman, Eugeen [BE/BE];  
Consciencestraat 45 bus 6, B-2018 Antwerpen (BE). VAN  
DEN MOOTER, Guy [BE/BE]; Lostraat 69, B-3212  
Pellenberg (BE). VAN HUMBEECK, Jan [BE/BE];  
Elzenbroekstraat 20, B-3053 Haasrode (BE).

(74) Agents: BIRD, William, E. et al.; Bird Goën & Co, Klein  
Delenstraat 42 A, B-3020 Winksele (BE).

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(54) Title: CRYSTALLINE MESOPOROUS OXIDE BASED MATERIALS USEFUL FOR THE FIXATION AND CON-  
TROLLED RELEASE OF DRUGS



(57) Abstract: The invention describes a new class of crystalline silica material having two levels of porosity and structural order. At the first level, building units are nanoslabs of uniform size having zeolite framework. At the second structural level, nanoslabs are assembled, e.g. linked through their corners, edges or faces following patterns imposed by interaction with cationic surfactant or triblock copolymer molecules. After evacuation of these molecules, microporosity is obtained inside the nanoslabs, and a precise mesoporosity between the nanoslabs depending on the tiling pattern of the zeolite nanoslabs, as evidenced by X-ray diffraction. These materials are useful for the fixation of biologically active species, such as poorly soluble drugs.



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